Entrepreneurial intention: Does entrepreneurship education play a role?

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Abstract

The objective of this study was to assess the impact of entrepreneurial education on entrepreneurial intention in South Africa. The study made use of a quantitative, exploratory research design. The study utilized an adapted, self-administered survey of 200 women in a South African province. A non-probability convenience sampling approach was followed. Data was analysed by means of comparative analysis and independent sample t-tests, analysed in SPSS version 25. Findings indicate that respondents who had been exposed to entrepreneurial education courses exhibited higher mean scores for entrepreneurial intention and its underlying components. Several underlying constructs, namely attitude towards entrepreneurship, risk-taking, cultural perspectives and self-efficacy were statistically significant in terms of their effects on entrepreneurial intent. The study therefore provides input for policy-makers and higher education institutions in the value of providing entrepreneurship education courses. The study therefore contributes to the existing body of knowledge by providing insights from an emerging market perspective of the value of entrepreneurship education in forming entrepreneurial intent.

Keywords: entrepreneurship; entrepreneurship education; entrepreneurial intent; South Africa

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Introduction

Entrepreneurship and the associated creation and growth of enterprises has been widely acknowledged as an important factor of production enabling Gross Domestic Product (GDP) growth, facilitiating employment creation as well as improvement of socio-economic welfare of a country's citizens (Nieuwenhuizen & Nieman, 2019). An increase in entrepreneurial activity can contribute to an improvement in the standard of living in a country. Entrepreneurship Education is one such way in which entrepreneurial activity can be increased (Nieuwenhuizen, Groenewald, Davids, Janse van Rensburg & Schachtebeck, 2016). The importance of entrepreneurship education in building future entrepreneurs has been widely acknowledged. Ladzani and Van Vuuren (2002:155) describe entrepreneurship education (EE) as "a three-legged pot of motivational, entrepreneurial and business skills training", while Albert, Sciascia and Poli (2004:5) define EE as "the structured formal conveyance of entrepreneurial competencies, which in turn refers to the concepts, skills and mental awareness used by individuals during the process of starting and developing their growth-oriented ventures". Despite the differing definitions, one commonality these have is imparting entrepreneurial qualities and skills. However, while numerous studies have been conducted on the topic of entrepreneurial intention, little evidence exists in a South African context on the influence of entrepreneurship education on entrepreneurial intention. The purpose of this study was therefore to determine whether entrepreneurial education plays a role in forming entrepreneurial intent. This study makes use of Ajzen's (1991) Theory of Planned Behaviour (TPB) to assess entrepreneurial intent, while expanding the TPB by inclusion of Entrepreneurial Education elements.

This paper commences with an overview of literature pertinent to the fields of entrepreneurship education and entrepreneurial intention.

1. Literature Review

This section firstly provides a theoretical exploration of the TPB, followed by a discussion of entrepreneurial intention. The section concludes with an overview of the field of entrepreneurship education.

The Theory of Planned Behaviour (TPB)

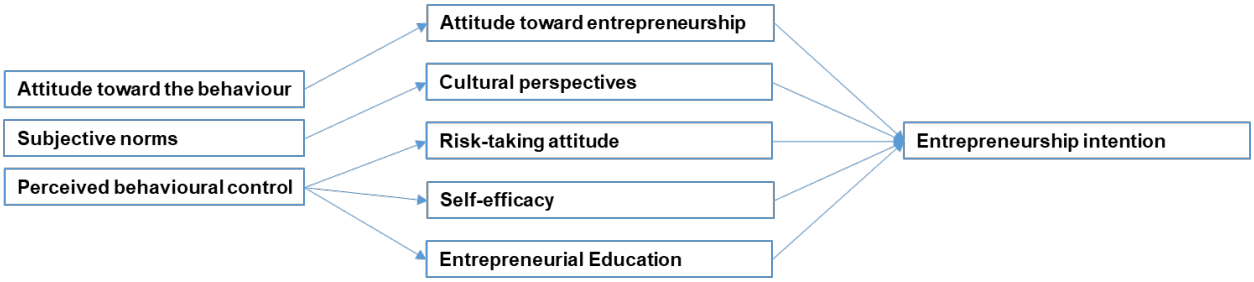
The Theory of Planned Behaviour, proposed by Ajzen (1991), is frequently used in practice to assess entrepreneurial intention and has been validated in numerous studies (Gird & Bagraim, 2008; Kautonen, van Gelderen & Fink, 2013; Malebana & Swanepoel, 2015; Dinc & Budic, 2016). The TPB proposes that intention is measured by means of three elements, namely (i) subjective norm, (ii) attitude towards the behavior and (iii) perceived behavioural control. The purpose of the TPB is therefore to explain the intention of a person in performing a particular behavior. Ajzen (1991:188) defines attitude towards behaviour as "the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question". Ajzen and Cote (2008) note that the belief that a person holds about the outcome of performing a behaviour will most likely induce a positive or negative attitude towards the behavior, which authors such as Kolvereid & Isaksen (2006), as well as Fretschner and Webber (2013) have linked to beliefs around autonomy, economic opportunity, financial success and responsibility. Subjective norms are defined as "the pressure one perceives from the social environment to either perform or not perform the behaviour". Ajzen and Cote (2008) note that social pressure is

generally informed by normative beliefs. Normative beliefs are regarded as “the expectation that a given referent individual or group would approve or disapprove of performing a behaviour” (Ajzen & Cote, 2008:302). Subjective norms have been found in some studies to not significantly influence EI (Krueger et al, 2000; Gird & Bagraim, 2008; Malebana & Swanepoel, 2015), while in other studies the opposite has been noted (Kautonen et al, 2013). Ajzen (2005) however explains that the triple antecedents of intention may differ among populations, geographical areas and individuals. Lastly, perceived behavioural control is defined as “the perceived ease or difficulty of performing the behaviour” (Ajzen, 1991:188). Perceived behavioural control is therefore based on control beliefs which may accelerate or encumber performing a particular behavior and which may be perceived as easy or difficult to perform (Ajzen & Cote, 2008). Ramos-Rodríguez, Medina-Garrido, Lorenzo-Gómez and Ruiz-Navarro (2010) mention that perceived behavior control is also at the nexus between social capital (a network of relationships) and the ability to identify a business opportunity. The TPB was developed due to the shortcomings in the original Theory of Reasoned Action (TRA), and resulted in the inclusion of perceived behavioural control. In the South African context, in which this study is based, the TPB has been successfully validated in a number of studies (Gird & Bagraim, 2008; Malebana & Swanepoel, 2015; Mbuya & Schachtebeck, 2016).

Entrepreneurial intention

Joseph (2017:423) defines entrepreneurial intention “as a state of mind directing a person’s attention, experience and action towards a specific goal, or a path to achieve business goal”, while Liñán, Nabi & Krueger (2013:77) define the concept as a “conscious awareness and conviction by an individual that they intend to set up a new business venture and plan to do so in the future”. Entrepreneurship is essentially regarded as a planned behaviour (Krueger *et al.,* 2000), therefore understanding entrepreneurial intentions is vital in promoting new venture creation (Gird & Bagraim, 2008). This therefore indicates that entrepreneurial intention is a crucial antecedent to any efforts in starting a business (Lee, Wong, Foo, & Leung, 2011; Martins, Santos & Silveira, 2019). Cognitive factors realted to beliefs, values and needs may influence the intention to create a new venture (Lee & Wong, 2004; Liñán & Chen, 2009), although exogenous factors such as cultural, social and economic elements may also play a role, albeit indirect and insignificant in predicting entrepreneurial activity (Krueger et al., 2000). Two competing theories are often used in literature and practice to investigate entrepreneurial intention (Solesvik, Westhead, Kolvereid & Matlay, 2012; Schlaegel & Koenig, 2014), namely the Entrepreneurial Event Model (EEM) and TPB. Krueger et al. (2000:416) highlights that “these models offer sound theoretical frameworks that specifically map out the nature of processes underlying intentional behaviour”. Schlaegel & Koenig (2014) explain that in the EEM, entrepreneurial intention is measured by means of perceived desirability, propensity to act, as well as perceived feasibility. While there are overlaps in the EEM and TPB, the focus of the EEM is on the individual’s perceived desirability and feasibility of an opportunity, when evaluating entrepreneurial intent. In contrast, the TPB is more strongly focused on underlying intentionality. The study therefore makes use of the TPB by making use of the following conceptual framework depicted in Figure 1, adding entrepreneurial education to the TPB.

Figure 1: Conceptual framework formulated for this study



***Source**: Author*

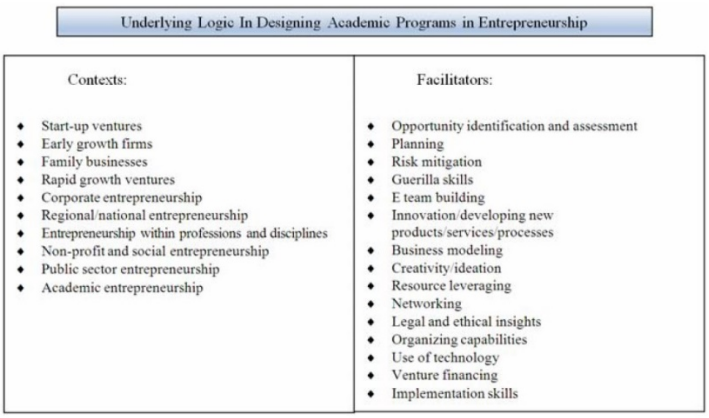
Entrepreneurship education

Given the importance of EE, it is noteworthy that EE is still a relatively young concept, first being established in American business school in the 1970s. Purdue University was the first institution to host an entrepreneurship conference which deliberated the role and contribution of a university to the development of entrepreneurship. Subsequent to this inaugural conference, the field of EE and associated body of knowledge has made significant strides (Guirong, Jinquan & Lei, 2011). Isaacs, Visser, Friedrich and Brijal (2007:614) aptly define entrepreneurship education as "the purposeful intervention by an instructor in the life of the learner to impart entrepreneurial qualities and skills to enable the learner to survive in the business". Douglas (2014) draws a distinction between the concepts of entrepreneurship education and general business studies, which he sees as quite distinct, as these two concept have different outcomes in mind. This view is corroborated by Nabi and Holden (2008), who argue that EE makes reference to skills, knowledge and experience designed as an investment into human capital to prepare individuals to start new business ventures. Studies such as by Mbuya and Schachtebeck (2016) confirmed this assertion as in this study, amongst many other, students who pursued an entrepreneurship-related qualification exhibited a stronger inclination to become an entrepreneur, when compared to students enrolled in other unrelated studies. Tobias and Ingrams (2010) further argue that the principal aim of EE is to prepare individuals to think entrepreneurially, start new business ventures and develop the economy. Timmons and Spinelli (2004) argue that entrepreneurship as a discipline can be learned by boosting self-efficacy and training individuals to identify opportunities and successfully run businesses. Botha (2006) however cautions that teaching entrepreneurship is a complex undertaking. Other authors, such as Chimucheka (2014), disagree, stating that individuals can be taught to recognize and act upon opportunities by means of innovative, disruptive ideas. A body of literature has emerged which statistically correlated EE and both entrepreneurial competencies and intent (Morris, Webb, Fu & Singhal, 2013; Malebana, 2016).

However, in the South African context in which this study was conducted, entrepreneurial education faces some challenges, such as education programmes which are not outcomes- or skills-based, entrepreneurship not being adequately promoted as a career option and learning methodologies which are inappropriate to the audience (Ladzani & Van Vuuren, 2002; Antonites, 2003; Botha, 2006). Outside of South Africa, other studies have determined challenges to EE, including, but not limited to, subjective self-belief about business opportunities, lack of business, management, marketing and accounting knowledge, few formal entrepreneurial initiatives in emerging markets, as well as a non-supportive culture and lack of societal support (Nsengimana, 2017; MIWE, 2018; Quartey, Danguah, Owusu & Iddrisu, 2018; Zhu, Kara & Zhu, 2019).

In terms of design of entrepreneurial education courses, Morris and Kuratko (2014) highlight the importance of the context in EE, as well as the factors that facilitate entrepreneurial behaviours. A summary of the context and facilitating factors is outlined in Figure 2.

Figure 2: Model guide to program design in entrepreneurship



Source: Morris & Kuratko (2014:12)

Morris and Kuratko (2014) go further to argue that EE courses and initiatives should both empower students and transform institutions and communities, highlighting the impactful role EE plays.

2. Research problem and objectives

South Africa faces numerous socio-economic challenges, such as high rates of unemployment and poverty, as well as low economic growth rates. Small businesses have been touted as the solution to many of these socio-economic ills as small businesses have been seen to be drivers of large scale job creation. However, while numerous studies have investigated entrepreneurial intent using the Theory of Planned Behaviour (TPB), the link to entrepreneurship education has not been conclusively explored. This study therefore aims to fill this void. The primary objective of this study was to assess whether entrepreneurial education influences entrepreneurial intention. The study further formulated secondary objectives related to the factors underlying EI. Secondary objectives therefore included to determine if EE had an influence on the attitude towards entrepreneurship (AW), on cultural perspectives (CP), risk-taking (RT) and entrepreneurial self-efficacy (ES).

3. Research Methodology

To achieve the primary and secondary objectives, the study employed a quantitative research approach by making use of a self-administered questionnaire. The population for the study comprised of female respondents from the North West province in South Africa, covering an area of approximately 104,882 $km^{2.}$. As no database of respondents exists in the North West

province, a convenience sampling approach was followed for accessibility reasons. The convenience sampling approach focused on respondents with shared interests, such as those participating in empowerment initiatives, heritage preservation interests and fitness activities. The questionnaire utilised in the study was adapted from an entrepreneurial intention questionnaire developed by Liñán and Chen (2009), which has been validated in a numerous other studies (Liñán et al., 2013; Malebana, 2014; Malebana & Swanepoel, 2015; Mbuya & Schachtebeck, 2016). The questionnaire contained three sections which contained demographic variables in Section A, EI related variables (attitude towards entrepreneurship, cultural perspectives, risk-taking attributes, entrepreneurial self-efficacy and entrepreneurial education) in Section B, as well as catering for more detailed responses on planned entrepreneurial endeavours in Section C. In order to accurately gauge responses, a 7-point Likert scale was employed. Data were analysed in the the Statistical Package for the Social Sciences (SPSS), version 25 and made use of a comparison analysis. In the comparison analysis independent samples t-tests were used. Independent samples t-test was used to compare mean scores between (i) the group that attended entrepreneurial education and (ii) the group that did not.

4. Findings and discussion

A total of 250 paper-based questionnaires were distributed, with 207 responses being returned, resulting in a response rate of 82.8%. However, only 200 of the received 207 questionnaires proved usable. From the 200 responses, 53 respondents had attended an entrepreneurship course, while 147 had not ever attended such a course. Table 1 indicates the means and standard deviations between respondents who have attended EE courses and those that did not.

Table 1: Mean and standard deviation for attendance of entrepreneurial training course

Factors	Attended course?	N	Mean	Std. Deviation
Entrepreneurial Intention	Yes	53	5.75	1.244
	No	147	4.87	1.713
Attitude Towards Entrepreneurship	Yes	53	5.82	1.175
	No	147	4.95	1.711
Factor 1: Cultural Perspective: Positive	Yes	53	4.98	1.081
	No	147	4.36	1.408
Factor 2: Cultural Perspective: Negative	Yes	53	4.42	1.138
	No	147	4.12	1.394
Risk-Taking Attributes	Yes	53	5.59	1.208
	No	147	4.80	1.607
Entrepreneurial Self-Efficacy	Yes	53	5.45	1.247
	No	147	4.51	1.666
Factor 1: education fails women entrepreneurs	Yes	53	4.58	1.450
	No	147	4.29	1.728
Factor 2: education needed for women entrepreneurs	Yes	53	5.50	1.638
	No	147	5.44	1.602

***Source**: Research findings*

Table 1 indicates that respondents who attended EE courses generally exhibited higher mean scores for EI, as well as for all of its underlying constructs. To determine if these differences between groups were statistically significant, the results of the independent t-tests are indicated in Table 2. To determine effect size, eta squared values were used. Cohen (1988) advises that eta squared values can be interpreted as follows: 0.01 = small effect, 0.06 = moderate effect and 0.14 = large effect.

Table 2: Results of independent t-test

		Leven's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Entrepreneurial intention	Equal variances assumed	12.639	0.000	3.379	198	0.001	0.86810	0.25688	0.36153	1.37466
	Equal variances not assumed			3.915	126.348	0.000	0.86810	0.22175	0.42927	1.30692
Attitude towards entrepreneurship	Equal variances assumed	12.074	0.001	3.406	198	0.001	0.86698	0.25453	0.36505	1.36892
	Equal variances not assumed			4.043	134.075	0.000	0.86698	0.21445	0.44284	1.29113
Factor 1: cultural perspective: positive	Equal variances assumed	9.965	0.002	2.904	198	0.004	0.61923	0.21320	0.19878	1.03967
	Equal variances not assumed			3.283	119.203	0.001	0.61923	0.18860	0.24578	0.99267
Factor 2: cultural perspective: negative	Equal variances assumed	6.158	0.014	1.390	198	0.166	0.29667	0.21345	-0.12426	0.71759
	Equal variances not assumed			1.528	111.873	0.129	0.29667	0.19411	-0.08794	0.68128
Risk-taking attributes	Equal variances assumed	8.989	0.003	3.246	198	0.001	0.78701	0.24244	0.30892	1.26511
	Equal variances not assumed			3.705	121.896	0.000	0.78701	0.21244	0.36645	1.20757
Entrepreneurial self-	Equal varianc	9.005	0.003	3.706	198	0.000	0.93067	0.25112	0.43546	1.42588

efficacy	es assumed									
	Equal variances not assumed			4.236	122.335	0.000	0.93067	0.21972	0.49573	1.36561
Factor 1: education fails women entrepreneurs	Equal variances assumed	3.941	0.049	1.099	198	0.273	0.29239	0.26601	-0.23219	0.81697
	Equal variances not assumed			1.193	108.773	0.235	0.29239	0.24499	-0.19318	0.77795
Factor 2: education needed for women entrepreneurs	Equal variances assumed	0.039	0.844	0.211	198	0.833	0.05442	0.25816	-0.45468	0.56352
	Equal variances not assumed			0.209	90.221	0.835	0.05442	0.26090	-0.46389	0.57273

***Source**: Research findings*

A statistically significant difference in the scores between the respondents who attended the entrepreneurial education course (M = 5.75, SD = 1.244) and those who did not (M = 4.89, SD = 1.713; t =3.915, p = .001 (2-tailed)) could be observed. This meant that equal variances could not be assumed. The t-test for equality of means indicated variances for the participants who attended the course and those who did not, were significant (p = .000). The magnitude of the differences in the means (mean difference = .87, 95% CI: .36 to 1.37) was moderate (eta squared = 0.07). The effect size therefore indicates that attendance of an EE course resulted in a moderate effect in developing EI, when compared to respondents who did not attend such a course. This finding is in-line with other studies which have determined a positive effect of EE on EI (Walter & Dohse, 2012; Ferri, Ginesti, Spanò & Zampella, 2018).

Further analysis of the constructs underlying EI indicate that for **attitude towards entrepreneurship** a statistically significant difference could be found between respondents who attended the course (M = 5.82, SD = 1.175) and those who did not (M = 4.96, SD = 1.712; t =4.043, p = .000). The magnitude of the differences in the means (mean difference = .87, 95% *CI*: .44 to 1.29) was moderate (eta squared = 0.08). This finding confirms those of other studies which affirm the effect of EE on attitude towards entrepreneurship (Devi, Panigrahi, Maisnam, Alyani & Bino, 2019). In terms of **cultural perspectives (positive)**, a statistically significant difference in the scores between the respondents who attended the course (M = 4.98, SD = 1.081) and those who did not (M = 4.36, SD = 1.408; t =3.283, p = .001). The effect size was deemed moderate at eta squared = 0.05. This finding is confirmed by other studies which found EE having a moderate effect on cultural perspectives of respondents from close family, friends and colleagues (Badr, El-Gharbawy, Wahba & Bary, 2018). For **cultural perspectives (negative)**, a statistically significant difference was also determined, however the effect size was small (eta squared = 0.01), indicating that the difference in terms of attending an entrepreneurial education course and acquiring negative cultural perspectives was small between the two

groups. This is in contrast to other studies which found that exposure to EE courses did not mitigate the negative cultural perspectives of respondents, especially if these were deep-rooted and institutional (Solesvisk et al., 2014). Next, a comparison between the **risk-taking** scores of respondents who attended the course (M = 5.59, SD = 1.208) and those who did not (M = 4.805, SD = 1.607; t =3.705, p = .003) were also statistically significant, with the effect size being moderate (eta squared = 0.07). This indicates that EE could moderately reinforce the qualities of the respondents to face entrepreneurial risks, a finding similar to that of Ndofirepi (2020). In terms of entrepreneurial **self-efficacy**, a statistically significant difference was also found between the scores for the two groups (M = 5.44, SD = 1.248) and (M = 4.51, SD = 1.666; t =4.236, p = .003), with a moderate effect size (eta squared = 0.09). This finding compares favourably with that of Bux and Van Vuuren (2019), who also found that attending entrepreneurial education courses over a longer period boosted entrepreneurial self-belief. It is however noteworthy that this study did not investigate length of exposure to the EE course.

5. Conclusion and implications

This study investigated the role entrepreneurial education plays on forming entrepreneurial intent. Findings indicate that respondents who had attended entrepreneurial education courses generally indicated higher mean scored for EI and its underlying constructs. Further analysis indicated that attitude towards entrepreneurship, risk-taking, cultural perspectives and self-efficacy were statistically significant in terms of their effects on entrepreneurial intent. These findings are in-line with previous studies for each of the underlying constructs. This study therefore confirms the relevance of the effect of EE on EI in a South African context. However, as with any study, this research also faced some limitations. Firstly, the non-probability convenience sampling approach does not allow for findings to be generalized. This also had an impact on the nature of the sample which solely comprised of women. Further, the cross-sectional nature of the research does not allow for tracking of measurement of any changes in EI over a period of time. It is for this reason that future research recommendations include the need for a longitudinal study which can more accurately track the conversion from entrepreneurial intent to actual new venture creation. Through this measure the success of EE programs becomes more practically measurable. Further, as risk-taking attributes of respondents are very personal and multi-faceted in nature a qualitative study might provide further insights into social dimensions of risk-taking.

However, this study holds several managerial and theoretical contributions. Firstly, the findings of the study provide an impetus for policy-makers to focus on providing entrepreneurship education courses on a wider scale as the benefits of a higher entrepreneurial intention have been highlighted in several studies. Higher education institutions are also encouraged to enhance entrepreneurship education courses across different specialisations in order to assist in lifting South Africa's low Total-Early Stage Entrepreneurial Activity (TEA) rate. The study further provides an extension to the TPB by means if inclusion of entrepreneurship education variables in Liñán and Chen's (2009) instrument.

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